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10/501,936	05/19/2006	Paul Smith	MEISS 71.032APC	7147

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EXAMINER	
BOYKIN, TERRESSA M	

ART UNIT	PAPER NUMBER
1796	

NOTIFICATION DATE	DELIVERY MODE
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary	Application No.	Applicant(s)	
	10/501,936	SMITH ET AL.	
	Examiner	Art Unit	
	Terressa M. Boykin	1796	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on *21 July 2004*.

2a)☐ This action is **FINAL**. 2b)☒ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *42-66* is/are pending in the application.

4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *42-66* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

a)☐ All b)☐ Some * c)☐ None of:

1.☐ Certified copies of the priority documents have been received.

2.☐ Certified copies of the priority documents have been received in Application No. _____.

3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1) ☒ Notice of References Cited (PTO-892)
2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
3) ☒ Information Disclosure Statement(s) (PTO/SB/08) Paper No(s)/Mail Date *2-9-5;7-21-4*.
4) ☐ Interview Summary (PTO-413) Paper No(s)/Mail Date. _____ .
5) ☐ Notice of Informal Patent Application
6) ☐ Other: _____.

Obviousness-type Double Patenting

The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. See *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970);and, *In re Thorington,* 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent is shown to be commonly owned with this application. See 37 CFR 1.130(b).

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

Claims **42, 50,57** are rejected under the judicially created doctrine of obviousness-type double patenting as being unpatentable over claims of **U.S. Patent No. 7235191;** or claims of **U.S. Patent No. 7160623;** or claims of **U.S. Patent No. 6548612;** or claims of **U.S. Patent No. 6737165.** Although the conflicting claims are not identical, they are not patentably distinct from each other because each of the patents claim a polyethylene of some type. within the body of the specification, each of the patents disclose that sintering of the polymer may be performed and although the specificaiton is not used in terms of a possible obviousness-type double patenting rejection, it may be used to define the terms and/or meets and bounds of the claim invnetion.

35 USC 112, Second Paragraph

Claims 42-66 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

With regard to the recited "**weight average molecular weight**", note that average molecular weight (for a polymer) defined by a number only is normally so meaningless as to be indefinite and thus in addition to being defined by one of the standard types (Mw, Mn, etc); if molecular weight is narrowly critical (i.e. necessary to establish patentability) there must be sufficient data to back calculate the property from which the molecular weight was calculated. (In that instance it is generally preferable to define the claimed molecular weight by the property). It is note readily apparent by the claims as written in view of applicants specification.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and(4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claims 42, 50, 57 are rejected under 35 U.S.C. 102(b, or e) as being anticipated by USP 7235191 cols. 1-4; or USP 7160623 cols. 1- 4; or 65448612 cols. 1-4 table III, IV and calims 1,5,13; or USP 6737165 cols. 1-5 and claims.

USP 65448612 discloses a method for producing an article comprising: melt-processing a composition comprising a poly(tetrafluoroethylene) polymer, wherein said polymer has (i) a melt flow index between 0.25 and about 50 g/10 min; (ii) an elongation to break of at least 10%; (iii) a crystallinity of 1-55%; (iv) less than 1 weight percent of co-monomer; and (v) less than 0.5 mol % of co-monomer; wherein all said co-monomer consists essentially of co-monomer selected from the group consisting of hexafluoropropylene and perfluoro(alkyl vinylether). Note that the poly(tetrafluoroehtylene) as disclosed by the reference reads on the polyethyleneas claimed. Aslo the ultra high molecular weight is considered to be inclusive of the molecular weight as claimed. Note the reference disdclsoes in one example:

" The mechanical properties of the melt-processed PTFE films were measured according to the standard method detailed above. A typical stress-strain curve is presented in FIG. 1 (A), for comparison purposes, together with that of a sample of commercial, pre-formed /sintered and skived film of 0.40 mm thickness (B). This figure shows that the melt-processed PTFE film (here of grade XVI (Table I)) has the typical deformation properties of a thermoplastic, semi - crystalline polymer with a distinct yield point and strain hardening. The stress-strain curves A and B resemble each other, which indicates that these melt-processed PTFE films do not have substantially inferior mechanical properties when compared to common, PTFE of ultra-high molecular weight. The mechanical data of the two products are collected in Table

USP 6737165 disclsoes a poly(tetrafluoroethylene) polymer having: (i) a melt flow index greater than 0.25 g/10 min; (ii) a stress at break of greater than 15 MPa; and (iii) less than 0.5 mol percent of co-monomer.

Melt-processing of the PTFE compositions according to the present invention, in its most general form, comprises heating the composition to above the crystalline melting temperature of the PTFE's, which, of once-molten material, typically are in the range from about 310.degree. C. to about 335.degree. C., e.g. about 320.degree. C. to about 335.degree. C., although somewhat lower and higher temperatures may occur, to yield a polymer fluid phase. Unlike standard (ultra-high molecular weight) PTFE above its crystalline melting temperature, the PTFE grades according to the present invention form homogenous melts that can be freed from voids and memory of the initial polymer particle morphology. The latter melt is shaped through common means into the desired form, and, subsequently or simultaneously, cooled to a temperature below the crystalline melting temperature of the PTFE's, yielding an object or article of good and useful mechanical properties. In one preferred embodiment, shaped PTFE melts are rapidly quenched at a cooling rate of more than 10.degree. C./min, more preferably more than 50.degree. C./min, to below the crystallization temperature to yield objects, such as fibers and films, of higher toughness. In processing operations involving transfer through one or more dies of melts of the PTFE.such as in fiber spinning, film- and tape extrusion, and the like, in one embodiment of the present invention it is highly beneficial to employ conical dies of low entrance angle (less than 90.degree.) as it is well established that this reduces melt-instabilities and melt fracture, and, therewith, increases the processing speed.

Each of the references discloses a prepared from the same components as claimed by applicants. Note applicant(s) "_____" is open language and does not exclude those additional moieties etc. disclosed herein. Any properties or characteristics inherent in the prior art, e.g. _____although unobserved or detected by the reference, would still anticipate the claimed invention. Note In re Swinehart, 169 USPQ 226. "It is elementary that the mere recitation of a newly discovered...property, inherently possessed by things in the prior art, does not cause claim drawn to those things to distinguish over the prior art". Since the disclosed_____ are expressed differently and thus may be distinct from those claimed, it is incumbent upon applicant(s) to establish that they are in fact different and whether such difference is unobvious. In view of the above, there appears to be no significant difference between the reference(s) and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

35 USC 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 42-66 are rejected under 35 U.S.C. 103(a) as being unpatentable over USP 7235191 cols. 1-4; or USP 7160623 cols. 1- 4; or 65448612 cols. 1-4 and calims 1,5,13; or USP 6737165 see abstract, claims.

Each of the references discloses a sintered polyethylene prepared from the same components as claimed by applicants except for the particular amounts and parameters,i.e. molecular weight etc. as claimed . It would have been obvious to one having ordinary skill in the art at the time the invention was made to employ particular amounts and/or parameters as known in the art, since it is well-established that merely selecting proportions and ranges is not patentable absent a showing of criticality. In re Becket, 33 U.S.P.Q. 33 (C.C.P.A. 1937). In re Russell, 439 F.2d 1228, 169 U.S.P.Q. 426 (C.C.P.A. 1971). Generally, it is prima facie obvious to determine workable or optimal values within a prior art disclosure through the application of routine experimentation. *See* In re Aller, 105 USPQ 233, 235 (CCPA 1955); In re Boesch, 205 USPQ 215 (CCPA 1980); and

In re Peterson, 315 F.3d 1325 (CA Fed 2003). Consequently, the claimed invention cannot be deemed as unobvious and accordingly is unpatentable.

Claim Rejections - 35 USC § 102

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless --

(e) the invention was described in a patent granted on an application for patent by another filed in the United States before the invention thereof by the applicant for patent, or on an international application by another who has fulfilled the requirements of paragraphs (1), (2), and (4) of section 371(c) of this title before the invention thereof by the applicant for patent.

Claim _____are rejected under 35 U.S.C. 102(e) as being anticipated by .

The reference discloses a method treating a polymer broadly using the same components as claimed by applicants. Since the disclosed amounts are expressed differently and thus may be distinct from those claimed, it is incumbent upon applicant(s) to establish that they are in fact different and whether such difference is unobvious. In view of the

above, there appears to be no significant difference between the reference and that which is claimed by applicant(s). Any differences not specifically mentioned appear to be conventional. Consequently, the claimed invention cannot be deemed as novel and accordingly is unpatentable.

Correspondence

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Terressa M. Boykin whose telephone number is 571 272-1069. The examiner can normally be reached on Monday-Thursday 10-5:30 Friday (work at home).

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, James Seidleck can be reached on 571 272-1078. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/Terressa M. Boykin/
Primary Examiner, Art Unit 1796